

REMARKS

Applicants would like to thank the examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe and claim the subject matter which applicants regard as the invention.

The Examiner did not note the receipt of the priority document that was submitted by applicant after the original filing date. The Examiner is requested to do so.

The Examiner also did not note the receipt of an IDS that was submitted by applicant upon filing. The Examiner is requested to do so.

The Examiner rejected the claims under 35 U.S.C. §112 as being ungrammatical and idiomatic. In particular, the Examiner rejected claims 1-2 and 6-7 under 35 U.S.C. §112, second paragraph, for indefiniteness. The claims have been amended to address these issues, and thus the rejection is moot.

Further, applicant traverses that the phrase “having a higher update frequency to the nonvolatile storage medium” is ambiguous. In the context of the claim, the term is being used in a relative fashion. One skilled in the art would know whether an update frequency is higher by examining the update frequencies of the various stored data and comparing them. The exact cut-off is not as important as the relative comparisons. Thus, the use of the phrase would not be ambiguous to one skilled in the art.

Claims 1-7 were rejected under 35 U.S.C. §102 as being anticipated by Mustafa *et al.* (U.S. 6,243,831). For the following reasons, the rejection is respectfully traversed:

Claim 1, as amended, recites an “information managing portion” for managing a “nonvolatile storage medium”, with the nonvolatile storage medium

having a plurality of memory areas each for storing a value of an information item that is regularly accessed, wherein said information managing portion stores one value of the information item in one memory area and further wherein said information managing portion subsequently stores an updated value of the information item in a different memory area such that the one value and the updated value are both simultaneously stored in the nonvolatile storage medium for some time period

(lines 4-11). Mustafa does not teach these limitations of claim 1.

Mustafa teaches a computer system with a power loss protection mechanism, not a mobile communications terminal. The loss protection mechanism as taught by Mustafa merely stores state information of a computer entering sleep mode on a hard drive so that the computer state can be recovered if there is a loss of power during the sleep mode (see Summary of the Invention). However, Mustafa does *not* suggest a “plurality of memory areas” each for “storing a value of an information item that is regularly accessed” as claimed. Instead, Mustafa merely stores the state of the computer in a hard drive in the unlikely case that the computer loses power. The stored information is accessed only to restore the computer if such a power loss occurred. Hence, the data is rarely accessed, if ever. It is not “regularly accessed” as claimed.

Further, Mustafa suggests storing only a single instance of the machine state upon the sleep mode. There is no suggestion that any information managing portion subsequently stores an “updated value of the information item in a different memory area such that the one value and the updated value are both simultaneously stored in the nonvolatile storage medium for some time period” as claimed. Thus, Mustafa does not teach all of the limitations of claim 1, and thus claim 1, as amended, is patentable over the reference. Claim 2, being dependent on claim 1, is patentable over the reference for the same reasons.

Further, claim 2, as amended, recites an information managing portion which “associates a management number with each stored value of the information item” with the management number “indicating an update of the stored value” (lines 2-4). Mustafa does not suggest any such management number for indicating an update, because Mustafa does not teach storing multiple instances of the machine’s state information.

Claim 2 also recites that the information managing portion “utilizes the management number to select the updated value of the information item stored in the nonvolatile storage medium” (lines 4-6). Again, Mustafa does not suggest this limitation because it does not teach retrieving any updated value of the stored information.

Claim 3, as amended, recites an information managing portion, a nonvolatile storage medium, and a volatile storage medium, wherein

said information managing portion stores identical information into the

nonvolatile storage medium and the volatile storage medium, and further wherein said information managing portion then compares the identical information stored in both the nonvolatile storing medium and the volatile storage medium for consistency during an initial state, and further wherein said information managing portion retrieves the information stored in the nonvolatile storage medium if the information stored in the volatile storage medium is not consistent with the information stored in the nonvolatile storage medium.

(lines 4-15). Mustafa does not teach these limitations of claim 3, because Mustafa does not suggest comparing identical information stored in both volatile memory and nonvolatile memory, and retrieving the information from the non-volatile memory if there is a inconsistency between the information stored in the two locations. Thus, claim 3 is patentable over the reference. Amended claims 4-7, and new claims 8-10, which depend, directly or indirectly, on claim 3, are thus patentable over the references for the same reasons, as well as for the limitations contained therein.

New claim 11 recites limitations similar to those in claim 1 at lines 5-12, and thus is patentable over the reference for the same reasons discussed for claim 1. Further, claim 11 recites a “receiver for receiving a wireless communication signal” and a “transmitter for transmitting a wireless communication signal”. The reference does not suggest these elements. Hence, claim 11 is patentable over the reference.

New claim 12 recites an information managing portion, a first memory area, and a second memory area, wherein said information managing portion stores “a first value of an information item in the first memory area” and wherein said information managing portion subsequently stores “a second value of the information item in the second memory area with the second value being an updated value of the information item”. Mustafa does not suggest storing an updated value in a second memory area, as claimed.

Claim 12 also recites that “the first value and the second value are both concurrently stored in the nonvolatile storage medium for some period of time” which is not suggested by the reference. Claim 12 further recites that said information managing portion “provides the second value which is an updated value to the mobile communications terminal when a current value of the information item is requested by the mobile communications terminal” which is also not suggested by the reference.

For any of the above reasons, claim 12 is patentable over the reference. Claims 13-15, which depend on claim 12, are patentable over the references for the same reasons.

Further, claims 13-15 are patentable for the limitations contained therein because Mustafa does not suggest that nonvolatile memory area is one of an EEPROM and a flash ROM (claim 13), or that the device comprises only a single battery (a battery being comprised of one or more storage cells electrically connected together--claim 14), or that any information item represents time information (claim 15).

New claims 16-20 each contain elements directed at storing and updating the value of an information item in a plurality of memory areas in nonvolatile memory, and for retrieving the most recently updated values from the memory when a value of the information item is requested. Mustafa does not suggest any such capability. In addition, each of these claims contain additional limitations not found in the reference. Accordingly, claims 16-20 are all patentable over the reference.

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 32857.

Respectfully submitted,

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Amendments with Editing Marks

1. (amended) A mobile communication terminal comprising:
an information managing portion; and
a nonvolatile ~~storing~~ storage medium managed by the information managing portion,
~~which has and having~~ a plurality of memory areas ~~each~~ for storing ~~same a~~
~~value of an information item that is regularly accessed,~~ items, wherein said
information managing portion stores one value of the information item in one
memory area and further wherein said information managing portion
subsequently stores sequentially the same an updated value of the information
item in a different memory area such that the one value and the updated value
are both simultaneously stored in the nonvolatile storage medium for some
time period. items having a high updating frequency in a plurality of memory
areas respectively.
2. (amended) A mobile communication terminal as claimed in claim 1, wherein said
information managing portion ~~attaches~~ associates a management numbers ~~with each stored~~
~~value of the information item, with the management number indicating an update of the~~
~~stored value, updated sequences upon storing information having a high updating frequency~~
~~to the nonvolatile storing medium at a time of updating the information, and then decides the~~
~~updated sequences of the information having the high updating frequency based on the~~
~~management numbers when wherein the information managing portion looks up the~~
~~information in utilizes the management number to select the updated value of the information~~
~~item stored in the nonvolatile storing storage medium.~~
3. (amended) A mobile communication terminal comprising:
an information managing portion; and
a nonvolatile ~~storing~~ storage medium; and
a volatile ~~storing~~ storage medium, wherein the nonvolatile storage medium and the
volatile storage medium are both managed by the information managing
portion; and wherein said information managing portion stores same identical
information into the nonvolatile ~~storing~~ storage medium and the volatile

storing storage medium, and further wherein said information managing portion then checks consistency between compares the identical information stored in both the nonvolatile storing medium and the volatile storing storage medium for consistency in during an initial state such as turning ON of a power supply, and further wherein said information managing portion and then looks up retrieves the information stored in the nonvolatile storing storage medium if the information stored in the volatile storage medium is not consistent with the information stored in the nonvolatile storage medium, as the information having normality if lack of the consistency of the information stored in the volatile storing medium is caused.

4. (amended) A mobile communication terminal as claimed in claim 3, wherein said information managing portion checks for a normality of the information by comparing with the information stored in the nonvolatile storing medium unless a lack of the consistency of the information stored in the volatile storing medium has occurred is caused.

5. (amended) A mobile communication terminal as claimed in claim 4, wherein said information managing portion stores same the identical information into the nonvolatile storing medium and the volatile storing medium at different timings times.

6. (amended) A mobile communication terminal as claimed in claim 3, wherein said nonvolatile storage medium has a plurality of memory areas each for storing same a value of an information item items, and said information managing portion stores sequentially the same values of the information items having a high updating frequency into a the plurality of memory areas of the nonvolatile storing medium.

7. (amended) A mobile communication terminal as claimed in claim 3, wherein said nonvolatile storage medium has a plurality of memory areas each for storing a value of an same information item items, and wherein said information managing portion attaches management numbers indicating updated sequences to upon storing information having a high updating higher update frequency to the nonvolatile storage medium, with the attaching occurring at a the time of the updating of the information, and further wherein said information managing portion then decides the which updated sequences of the information having the high higher update updating frequency based on the management numbers when

the information managing portion looks up the information stored in the nonvolatile storing medium.